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ABSTRACT

The purpose of this study was to propose a relatively simple basic paradigm that may be used in a number of different ways to experimentally determine communicators' differential perceptions of their own and another's messages in a transaction. The subjects were 28 pairs of college speech-communication students, randomly selected. The only criterion for selection was that the two members of each pair be strangers, in order to avoid possible contamination from preacquaintance. The measurement instrument was a set of statements about a controversial national topic, followed by five-step Likert-type scales of agreement-disagreement. The statements were developed by using pilot subjects from the same population as the ones used in the study. Each was asked to compile a list of 15 possible topics for discussion concerning the Watergate affair. From these lists, 15 attitudinal statements were generated. The subjects then talked together continuously for 20 minutes about their attitudes and feelings concerning Watergate. Finally, the subjects completed the questionnaire. The results indicated that in every case, when a subject's perception of his own attitude was compared with his partner's perception of his attitude, significant differences were found. (WR)

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A PARADIGM FOR STUDYING CONGRUENCE OF PERCEPTIONS OF COMMUNICATION IN A DYAD

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A PARADIGM FOR STUDYING CONGRUENCE OF PERCEPTIONS OF COMMUNICATION IN A DYAD

As the terms "process" and "system" are applied increasingly to definitions of communication, theorists who accept these notions are increasingly likely to experience dissonance over the realization that their research paradigms do not reflect them. Perhaps this dissonance is reduced by acknowledging the immense difficulty of actually applying a systems approach to an experiment. But the probability persists that we will likely continue to study incomplete segments of the communication transaction -that is, unless alternative strategies are applied.

Communication researchers in the past twenty years have placed increasing emphasis on feedback as a variable in the communication process (5). The assumption is that feedback cues (and, the encoding cues which evoke the feedback) are interpreted correctly by the source and the receiver.[1] Indeed, implicit in the above assumption is the prior assumption that the messages encoded by the source and the receiver during feedback have some kind of "objective reality" which will be interpreted either correctly or incorrectly by the other communicator(s).

A more systemic approach to the study of communication suggests that no message exists outside the perceptions of the communicators. This conceptual approach is expressed by Mortensen: "Communication occurs whenever persons attribute significance to message-related behavior" (10). A similar approach is formulated by Sereno and Bodaken, who say that communication is the selection, organization, and interpretation of external and internal verbal and nonverbal cues" (14). Such an approach is an underlying assumption of this paper.

If, then, we cannot define a message in objective reality, but only as it exists in the minds of the communicators, it becomes interesting to ask to what degree perceptions of the meaning of a source's own message correlate with the perceptions of the receiver about the same message. The answer may very well be consistent with Barnlund's observation that, "Although a man is assumed to be his own 'most enchanted listerner,' one suspects that on many occasions men do not hear all or even a major part of what they themselves are saying" (1:350).

Several studies bear at least indirectly upon the problem of correlations of perceptions of messages. Block and Bennett (3) studied Q-sorts of a single subject describing her interactions with twenty-three individuals with whom she had developed personally relevant social relationships. These were compared with Q-sorts made by the twenty-three individuals in an attempt to assess "consensual accuracy"--"the extent to which an individual's appraisal of his various two-person social situations coincide with the

[1]The terms "source" and "receiver" are used only to differentiate the communicators when it is necessary; their employment does not imply a conception of a linear message flow from source to receiver.

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evaluation of the same situation by the other participating individuals." They found that the roles manifested by the subject varied as a function of the people with whom she was interacting.

Mehrabian and Reed review relevant research findings and outline a series of hypotheses concerning the determinants of "communication accuracy," defined as "the degree of correspondence between the referents decoded, or inferred, from a set of communication behaviors by an addressee and the referents encoded, or represented, in those communication behaviors by the communicator" (9:365). Accuracy in communication is conceived as being determined by five sets of independent variables: attributes of the communicator, the addressee, the channel, the communicator, and the referent. The authors test no hypotheses, but suggest the use of Carroll's paradigm (13:200), in which two communicators are seated opposite one another at a table but are separated by a partition. In front of each communicator are several referent objects, such as blocks or pictures of various colors and shapes. In a simple task, the speaker selects one of these objects and attempts to communicate to the other which one he has chosen. Communication accuracy is achieved if the listener correctly identifies the object which the speaker has selected.

Laing, Phillipson, and Lee developed their Interpersonal Perception Method (IPM) primarily for use in the therapeutic setting with marital partners and other family members. The IPM makes use of 60 dyadic issues concerning adjustment in an interpersonal relationship, about which twelve questions are to be answered. The answers are always grouped around three questions: "How true do you think the following are?"; "How would SHE answer the following?"; and "How would SHE think you have answered the following?" Answers for each person are charted and compared for correlation of perceptions.

Although these studies provide interesting insights into the interpersonal perception process, the methods and theoretic approaches can be criticized on at least three counts: (1) In the Block and Bennett study, only one subject's perceptions were compared with those of the others. A large number of subjects can easily be used in the proposed paradigm. (2) The word "accuracy" presents a misleading conceptualization. Block and Bennett assume that when the main subject differs from the interacting others in perception, she is "distorting" her own perceptions of her role. Mehrabian and Reed's choice of paradigm provides an experimental analogue to the communication situation only in which the speaker's referent object is identifiable independently of the speaker's communicative message, and "in which a criterion of accuracy is easily established" (9:332). In most real-life communication situations, especially where attitudes are being discussed, such a criterion of accuracy is impossible to define. In these cases, the terms "accuracy" and "distortion" are considered incongruous with "perception" by definition. (3) In the Block and Bennett and Laing, Phillipson, and Lee studies, no actual communication transaction is included in the experiment or counseling situation. The inclusion of a transaction offers obvious advantages in manipulation and control of independent variables, and in the opportunity to observe the dynamics of the transaction. Although Mehrabian

and Reed suggest use of an actual communication, the paradigm they select is rather formal and divorced from real-life interpersonal encounters.

The purpose of this study is to propose a relatively simple basic paradigm that may be used in a number of different ways to experimentally determine communicators' differential perceptions of their own and another's messages in a transaction. The basic study attempted to arrive at a measure of the degree to which communicators agree upon the messages evolved during a transaction.

METHOD

Subjects

Since this study will serve as a basic paradigm, demographic and personality variables were not considered. Subjects were 28 pairs of college speech-communication students, randomly selected. The only criterion for selection was that the two members of each pair be strangers, in order to avoid possible contamination from pre-acquaintance.

Materials

The measurement instrument was a set of statements about a controversial national topic (impeachment of President Nixon), followed by 5-step Likert-type scales of agreement-disagreement. This was developed by using pilot subjects from the same population as the ones used in the study. Each was asked to compile a list of 15 possible topics for discussion concerning the Watergate affair.

From these lists, 15 attitudinal statements were generated. The statements were:

1. Nixon had the right to fire Archibald Cox.
2. Nixon knew about or planned the 18-minute erasure on the Whitehouse tape.
3. John Dean told the truth about Nixon in the Senate Watergate hearings.
4. Nixon has cheated on his tax returns while at the Whitehouse.
5. "Executive privilege" allows Nixon to withhold the tapes or other evidence from the court.
6. Nixon should take the blame for surrounding himself with immoral aides and advisers prone to criminal acts.
7. Some 1972 campaign funds were used illegally by the President.

8. Nixon has undergone an unfair trial by the Press and the American people.

9. Nixon has shown illegal favoritism to big business.

10. Impeachment proceedings should begin as soon as possible.

11. Nixon is guilty of criminal acts.

12. Nixon has been honest with the American public in his televised speeches and press conferences concerning Watergate.

13. Nixon is guilty of abuse of power.

14. Nixon committed no wrongs in the financing of his private homes at San Clemente and Key Biscayne.

15. Impeachment would not be good for the country.

Each statement on the instrument was followed by three questions:

1. Was this particular topic discussed in your conversation?

   a. Yes
   b. No

2. To what degree do you agree with the above statement?

   a. strongly agree
   b. agree
   c. no opinion
   d. disagree
   e. strongly disagree

3. To what degree would you estimate that the person with whom you talked would agree with the above statement?

   (same categories as number 2)

Procedure

After a check on pairs of subjects for prior acquaintance, each pair was given the following instructions:

> You are to talk together continuously for about twenty minutes about your attitudes and feelings concerning the Watergate situation. Feel free to go into depth about the subject, but try not to get hung-up on one or two minor points. We are trying to find out how well people listen to and understand each other in short conversations such as the one you are participating in.

In case you have trouble thinking about specific topics, here is a list of topics that other people in this experiment have talked about.

I will tell you when to stop--then you will be asked to fill out a short questionnaire concerning this experience.

Since there is little prior research evidence to suggest amount of correlation between communicators' perceptions of the meaning of each others' messages, it is not possible to predict specific correlational hypotheses.

Answers to Question 1 for each statement were compared for each pair. A mean percentage of agreement was computed for the dyads to determine agreement as to whether the question was actually discussed. Then correlated t-tests were computed for each of the 15 statements to determine correlation of congruence of perceptions of attitudes within the dyads.

RESULTS

Comparisons of answers to question 1 for each statement over all dyads showed that the pairs agreed on whether or not a particular question was discussed 84% of the time.

As shown in Table 1, significant differences past the .01 level were found for all 15 questions. In other words, in every case, when a subject's perception of his own attitude was compared with his partner's perception of his attitude, significant differences were found. This finding seems to show that, at least in this study, congruence of perceptions was not very great; in traditional terms, messages sent did not equal messages perceived.

TABLE 1

T-VALUES SHOWING CONGRUENCE OF PERCEPTIONS OF ATTITUDES IN DYADS FOR EACH QUESTION

QUESTION	Df	t	p
1	27	4.10	<.01
2	35	4.81	<.01
3	23	2.64	<.01
4	29	5.20	<.01
5	17	5.00	<.01
6	17	5.60	<.01
7	19	2.64	<.01
8	27	5.72	<.01
9	17	3.45	<.01
10	37	4.94	<.01

TABLE 1 (Continued)

11	39	5.59	<.01
12	27	4.16	<.01
13	26	4.32	<.01
14	13	5.34	<.01
15	41	6.36	<.01

DISCUSSION

One possible weakness in the method of the study was the high fall-out rate of subject pairs. Many pairs either agreed that the statement was not discussed, or disagreed - one answering YES and the other answering NO. Whenever either of these two options occurred, correlation of congruence of perceptions of attitudes could not be observed. This reduced the sample size. This "loss of subjects" could be reduced in subsequent research by either increasing the sample size significantly or employing some method to insure that the subjects discuss most of the topics represented in the statements.

This paradigm does avoid disadvantages of prior research concerning congruence of communicators' perceptions in that it can employ any number of subjects; it does not presume that one communicator's message or response is "inaccurate" or "distorted" if it does not correlate with the other's; and the paradigm offers opportunities for a myriad of manipulations and observations of the actual transaction. Consequently, though this study does give us interesting insight into the process of communicative perception, its greater interest lies in its ability to serve as a flexible paradigm for the study of the interaction of many variables with perception. Suggestions for further research using this paradigm will now be discussed.

Independent Variables

Demographic variables such as age, sex, socio-economic class, and level of education could easily be used in any combination as independent subject variables. One might suspect that all of these variables would affect the correlation, or mutual perception of communication.

Another pertinent question is: Do certain personality traits, such as dogmatism, authoritarianism, self-esteem, etc., affect the ability of a person to perceive the meaning of others' messages? Likewise, it would be interesting to see whether power, status, liking for the other participant, similarity, credibility, mutual trust or suspicion, co-orientation in attitudes, stress, and differential role expectations would affect the correlation of perceptions.

Research by Mortensen and Sereno (11) suggests that discrepancy and ego-involvement are interacting influences affecting human information processing and perceptions of communication. It seems probable that ego-

involvement in the topic could also affect the evolvement of mutual perceptions of communication. Ego-involvement and discrepancy could be used as independent variables in this paradigm by pre-testing for both subjects' involvement in the topic, and the discrepancy of each one's attitudes from the other's.

Newcomb's model of co-orientation in communication posits that two people (A and B) interact with one another systemically in relation to an object in their environment (x) (12). He states specifically that "...the greater the positive attraction toward B (from A), and the more intense the attitude toward X, the greater the likelihood of cognitive distortion toward symmetry. Hypothetically, then, perceived symmetry with regard to X varies as a function of intensity of attitude toward X and attraction toward B." This hypothesis could also be tested within the present paradigm by pre-testing for involvement in the topic and attraction toward the other member of the pair.

The influence of contextual factors--for example, physical surroundings, formality of the situation, time of day, number and length of transactions, etc.--could also be tested.

Variations in the Paradigm

In addition to studying the effects of various independent variables on mutual perception using this paradigm, it is also possible to study the internal dynamics of perception. For instance, what does the receiver perceive about the source's communicative style that the source himself does not? Barnlund writes: "Messages simultaneously carry expressive meanings that reflect internal states and instrumental meanings that comment on external events" (1:350). He suggests that one can distinguish between "manifest and latent levels of meaning." If it is true that "expressive meanings" comment on internal states, is the receiver more likely to perceive these cues than is the source? What are the cues of latent levels of meaning? Are they primarily nonverbal rather than verbal? Ekman and Friesen (4) found that certain hand movements, such as involuntary shrugs, could reliably predict whether or not a person was telling the truth under pressure. It seems likely that there are many such clues to deceptiveness, as well as other internal states and feelings, which may or may not be readily perceivable by the receiver of the source. Can these cues be generalized across personality differences with any reliability? Perception of such latent meaning cues could be studied within the present paradigm by adding measures of perceptions of nonverbal behavior during the transaction.

Laing, Phillipson, and Lee contend that a person's field of experience is filled not only by his direct view of himself (ego) and of the other (alter), but of what they term "meta-perspectives"--"my view of the other's (your, his, her, their) view of me" (7:5). The presence of others and others' reactions to a person has a profound effect on his identity, so that it undergoes many metamorphoses or "alterations," in terms of the others he becomes to the others. These alterations are interiorized by the person to

become multifaceted "meta-identities," or others a person is in his own eyes for the other.[2] It seems that the "metaperspectives" could be incorporated easily enough into the present paradigm by adding another question after each statement: "To what degree do you think the person with whom you talked thinks you agree with the above statement?" Thus, the paradigm could also test the factors which affect the formation and stability of "metaperspectives."

In conclusion, it is impossible that any one study could provide a total picture of all the interacting variables affecting communication. However, a large body of research on variables related to perception, using similar paradigms, could help to solve problems of providing experimental verification to our systemic conceptualizations of the human communication transaction.

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[2] George Herbert Mead defined this concept of "meta-identity" as the "generalized other"--a role from which a person views himself, which depends upon the development of a general view of relevant others' evaluation and image of him 6 .

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